

## RECOMMENDATIONS CONCERNING APPROPRIATIONS FOR 1905.

It is recommended that the appropriations for the fiscal year beginning July 1, 1905, be the same as those for the current fiscal year, with the following exceptions:

An increase of \$1000 per annum, from \$2000 to \$3000 per annum, in the salary of the chief of the Climate and Crop Division is urgently recommended. This official has charge of the climate and crop service of the Bureau. He writes the weekly National Crop Report and supervises the reports issued by State section directors. For many years his work has been of such a high order and has so commended itself to the agricultural and commercial industries of the country as to reflect credit upon the public service. In order that these reports, which frequently influence the price of the products of the farm, may command the confidence of the public, it is essential that there be assigned to the work an official whose integrity, as well as whose ability, is so high as to be above suspicion. The present incumbent has made no request for advancement, but I am firmly of the opinion that it would be a wise economy, as well as a just action, to recognize his many years of valuable and faithful public service by making the increase in salary herein recommended.

## GENERAL CLIMATIC CONDITIONS.

By Mr. W. B. STOCKMAN, Chief, Division of Meteorological Records.

## ATMOSPHERIC PRESSURE.

The mean pressure for the year was high over the Middle and South Atlantic and east Gulf States, Mississippi and Missouri valleys, Ohio Valley and Tennessee, extreme southern portion of the Lake region, northern coast of California, and Oregon, with the crest showing average readings of 30.10 inches over West Virginia.

The mean pressure was low over southwestern New Mexico, Arizona, southern Nevada, and southeastern California, with an average minimum mean reading of 29.89 inches at Yuma.

The annual mean pressure was below the normal in northwestern California, western and northern Oregon, Washington, the northern portion of Idaho, and western and southeastern Montana; also over the extreme southwestern portion of California. In all other districts it was above the normal, with the greatest departure, +.05 inch, at Bismarck, N. Dak., and Moorhead, Minn. The greatest negative departures did not exceed -.03 inch.

## TEMPERATURE.

The mean temperature for the year was below the normal in the districts from extreme western Florida, northeastern Mississippi, northeastern Arkansas, central Missouri, eastern Nebraska, and central Minnesota eastward to the Atlantic Ocean; also in western North Dakota. In all other districts the mean for the year was above the average.

As a rule the departures were quite marked and ranged from  $-2.0^{\circ}$  to  $-3.6^{\circ}$  in the New England and Middle States, upper Ohio Valley, southeastern upper Lake region, and lower Lake region; and  $+2.0^{\circ}$  to  $+3.4^{\circ}$  generally over the slope and Plateau regions. The greatest negative departures occurred over central New England, and the maximum positive departures in southeastern Idaho.

The mean temperature for the year was as low as any other since the beginning of record at Minneapolis, Minn.; North Head, Wash., Block Island, R. I., and Washington, D. C.;  $0.1^{\circ}$  lower than any preceding year at Parkersburg, W. Va.;  $0.2^{\circ}$  lower at Lincoln, Nebr., New Haven, Conn., and Wilmington, N. C.;  $0.3^{\circ}$  lower at Duluth, Minn., and Hannibal, Mo.;  $0.5^{\circ}$  lower at Nantucket, Mass., Baltimore, Md., and Columbia, Mo.;  $0.8^{\circ}$  at Evansville, Ind.;  $0.9^{\circ}$  at Portland, Me., and Sault Ste. Marie, Mich.;  $1.0^{\circ}$  at Richmond and Wytheville, Va.;  $1.2^{\circ}$  at Narragansett, R. I., and Harrisburg, Pa.;  $1.4^{\circ}$  at Northfield,

It is also recommended that the salary of the assistant chief of the Division of Accounts of the Department of Agriculture be increased from \$2000 to \$2500 per annum. This official, who is appropriated for in another part of the bill making appropriations for the support of the Department of Agriculture, serves, under the joint direction of the Disbursing Officer of the Department and the Chief of the Weather Bureau, as disbursing clerk of the Bureau. For nearly ten years I have had the benefit of his valuable assistance in handling the fiscal affairs of the Bureau. I have implicit confidence in his integrity and know that his ability as an accountant is of the highest order. If the committee in Congress would look into the manner in which his many and important duties are performed, I believe that they would agree with me that his long and faithful service should be rewarded by the advancement in his salary that is now recommended. The Disbursing Officer of the Department joins me in this recommendation. There is no part of the work of the Weather Bureau that requires higher executive and business ability than that performed by this officer.

Vt.;  $2.1^{\circ}$  at Scranton, Pa.;  $2.5^{\circ}$  at Binghamton, N. Y.;  $2.6^{\circ}$  at Houghton, Mich., and  $2.9^{\circ}$  at Syracuse, N. Y.

East of the west Gulf States and the Missouri River, maximum temperatures of  $100^{\circ}$ , or higher, rarely occurred. Minimum temperatures of  $-40^{\circ}$ , or lower, occurred in northeastern New York, northwestern New England, northwestern Wisconsin, northern Minnesota, northern North Dakota, and northeastern Montana.

## PRECIPITATION.

The annual precipitation was below the normal in the Gulf and Atlantic States, except southeastern Florida, in the Ohio Valley and Tennessee, except central Indiana, in the Lake region, except about eastern Lake Ontario and southern Lake Superior, in the Mississippi Valley, except northeastern Missouri and extreme southeastern Iowa, in the central and upper Missouri Valley, western North Dakota, the northern and southern slope and Plateau regions generally, the north Pacific coast, and the extreme south Pacific coast. In the remaining districts the precipitation was above the normal.

In the Gulf States, portions of the Middle Atlantic and South Atlantic States, and in the Ohio Valley and Tennessee the deficiency was very marked, and ranged from  $-10.0$  inches to  $-25.6$  inches, the greatest deficiencies,  $-20.0$  inches or more, being reported from the northeast coast of North Carolina, and in portions of Alabama and Tennessee. Excesses ranging from  $+5.0$  inches to  $+11.3$  inches were reported from northern Missouri, northeastern Kansas, southeastern Florida, northwestern California, and southwestern Oregon.

Droughty conditions obtained to some extent at certain portions of the year in some of the Southern and Western States. A very severe, widely extended, and long-continued drought obtained in the Southern and Middle Western States in the late summer, fall, and in places well into the winter. In Virginia it began in August and continued through November. In North Carolina a very severe drought obtained in many central counties in May, which was broken during the last two days. Drought conditions again obtained in September, continued through October, and were broken on November the 3d and 4th. This was the longest drought on record in the State continuing from forty to sixty days at a number of stations. It was most severe in the western portion.

In South Carolina May was droughty, the north-central and

coast districts suffered most. Drought conditions were somewhat relieved during the last three days, but continued generally over the State through June, and were broken during July. During September drought conditions were again severe in central and western and some southern districts. They were relieved somewhat over the eastern half of the State during October, and continued into November, during which month, and also December, the rainfall was still deficient.

In Georgia May was the eighth consecutive month with deficient precipitation, and fears were becoming general regarding the outcome; however conditions were greatly improved by beneficial showers at the end of the month. Drought conditions again obtained after September 8, and became severe; these conditions increased in severity during October, and water in streams and wells became scarce, and it was necessary, in localities, to haul water for stock and factories. Some factories were forced to work but half time on account of the scarcity of water. These conditions were ameliorated during November. This drought was the worst in years.

In Alabama drought conditions obtained in portions of the State during April, May, and June.

They again became evident in some north, middle, and southeastern sections during September and continued until November 2-4 when they were broken. During these two months stock water had to be hauled, in some places, long distances. This drought continued generally from eight to ten weeks, and was one of the most remarkable in the records of the State.

Drought conditions began to be evident about September 15 in Mississippi, became serious in October, and were not broken until December.

In Arkansas drought conditions began to be felt about August 15, and continued until the third decade of December, when they were broken.

The need of more moisture began to be felt in some western counties of Tennessee during August; continued over the State during September with some amelioration about the third decade. Occasional showers helped conditions during October, but the drought was not broken entirely until November 3 and 4.

In Kentucky complaints of lack of moisture began to be made during the first part of August, and by the end of October drought conditions were very severe, in many localities it being necessary to drive stock several miles to water. These conditions continued generally throughout November, except in a few southeastern counties.

In West Virginia drought conditions were apparent in portions of the State during May, and by the middle of September were severe throughout the State, and continued into December. At the end of November water was very scarce.

In Pennsylvania the last decade of September was very dry generally. In the central and western districts November was the driest on record; springs were nearly dry, streams very low, and it was necessary to haul water for stock and domestic purposes. These conditions continued into December.

Water for stock became very scarce in many southern counties of Ohio during September. The October rainfall was deficient, and during November the water supply failed very rapidly. At many places it was the driest month on record. These conditions were broken about the middle of December.

In Indiana drought conditions became apparent about October 15 and continued until toward the end of December.

Droughty conditions obtained during October in Illinois, especially in the central portion of the State, and continued throughout November. The December precipitation was below the average.

## DESCRIPTION OF TABLES AND CHARTS.

By MR. WM. B. STOCKMAN, Chief, Division of Meteorological Records.

For description of tables and charts see page 475 of REVIEW for October, 1904.